

## **SOLID STATE LIGHT DEVICE**

### **ABSTRACT**

5 A photon emitting device comprises a plurality of solid state radiation sources to  
generate radiation. The solid state radiation sources can be disposed in an array pattern.  
Optical concentrators, arranged in a corresponding array pattern, receive radiation from  
corresponding solid state radiation sources. The concentrated radiation is received by a  
plurality of optical waveguides, also arranged in a corresponding array pattern. Each optical  
waveguide includes a first end to receive the radiation and a second end to output the  
10 radiation. A support structure is provided to stabilize the plurality of optical waveguides  
between the first and second ends. The photon emitting device can provide a replacement for  
a discharge lamp device in various applications including road illumination, spot lighting,  
back lighting, image projection and radiation activated curing.